DOCUMENT RESUME

ED 475 490 EA 032 468

AUTHOR	Pan, Diane; Rudo, Zena; Smith-Hansen, Lotte
TITLE	Resource Allocation and Student Performance Improvements in 12 Districts in the Southwest Region.
PUB DATE	2002-11-07
NOTE	11p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (Chattanooga, TN, November 6-8, 2002).
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	Academic Achievement; Administrative Policy; Economics of Education; Educational Equity (Finance); *Educational Finance; Educational Resources; Elementary Secondary Education; Financial Needs; *Human Resources; *Resource Allocation
IDENTIFIERS	Resource Utilization; *Resources in Education

ABSTRACT

A policy research study examined the allocation of financial and human resources in 12 school districts that have shown improvements in student achievement over time. The study examined district-level patterns of resource allocation and the decision-making structures that guide spending, as well as barriers and challenges. Data were gathered from national data sets and from interviews, focus groups, and surveys of decision-making personnel in three districts in Arkansas, Louisiana, New Mexico, and Texas. Descriptions of the staffing and fiscal practices of the improvement districts, and comparisons of each district to groups of districts of similar size within their respective state were analyzed. The study found that the 12 improvement districts were able to make sustained improvements in student performance without having substantially more resources than comparable districts. The improvement districts spent available funds more efficiently than other districts by relying on data-driven allocation resources. Additionally, the improvement districts focused on recruitment and retention efforts, salary and incentive structures, and staff-support systems to ensure having a quality staff. Finally, the 12 districts sought to improve students' performance by focusing attention and resources on instructional activities. (WFA)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 475 490

Resource allocation and student performance improvements in 12 districts in the Southwest region

By

Diane Pan, Southwest Educational Development Laboratory

Zena Rudo, Ph.D., Southwest Educational Development Laboratory

Lotte Smith-Hansen, Charles A. Dana Center, The University of Texas at Austin

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

E. Rudo

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Paper presented at the annual meeting of the
Mid-South Educational Research Association
November 6-8, 2002, Chattanooga, Tennessee

DRAFT
Please do not cite without permission

EA 032 468

BEST COPY AVAILABLE

Resource allocation and student performance improvements
in 12 districts in the Southwest region

I. Problem statement and theoretical framework

In a time of rising expectations, increased accountability, and a more global and competitive economy, everyone wants to know how to guarantee student success. This question is of great importance for every child in America and for his or her future, as well as for the nation as a whole. Teachers, parents, administrators, school boards, policymakers and researchers are all stakeholders in ensuring student success. Across the country, more than $324 billion is spent annually on educating America's children, and education is often the biggest single line item in state budgets. But the relationship between resources and student performance is still not well understood, despite decades of research. People at all levels of the educational system are still asking how to best support student achievement through the effective and efficient use of resources.

One important question concerns whether resources or demographic factors (such as family background or socio-economic status) are the stronger determinants of student success. Scholars disagree about the strength of the relationship between resources and achievement. Some researchers have found no association or only a weak association between school resources and student performance (Coleman et al., 1966). Coleman and colleagues (1966) instead pointed to the importance of family background as a significant predictor of student achievement. Other researchers have found consistent and positive relationships between resources and performance (Hedges, Laine, & Greenwald, 1994).

Another question concerns whether increased funding will automatically produce improvements in student achievement. Some argue that the tremendous increases in funding for education over the last 40 years have not been accompanied by corresponding improvements in student achievement (Hanushek, 1994; Odden & Busch, 1998). Recent adequacy studies and production function studies have explored the question of exactly how much is needed to produce desired educational outcomes. Again, demographic factors are of great importance, and the debate is ongoing as to how much more is needed for educating children from disadvantaged backgrounds.

What is clear is that further increases in funding are not on the horizon in many states. With rising expectations and increased accountability, the challenge for schools and districts then becomes how to best support student success with resources at current levels since requests for more money are likely to go unanswered.

One approach is the more deliberate allocation and reallocation of fiscal and human resources. Historically, school districts have been very consistent in their resource allocation strategies (Miles & Darling-Hammond, 1998). During increases in state aid or property taxes, districts tend to spend new operating funds for lowering class sizes and updating teacher compensation (Picus & Fazal, 1995). Increases in program (or categorical) funds are generally used by districts to invest in new technology, teacher aides, and professional development. Research on states implementing accountability reforms has explored resource allocation in terms of expenditures

for instruction, instructional support services, and school and district administration (Hannaway, McKay, & Nakib, 2002). Ideas about best practices in education are emerging, but people at all levels of the system still want to know exactly what works and where to invest their resources.

In the process of making decisions or policies about resource allocation, one approach is to examine schools and districts with demonstrated student success, the assumption being that they are allocating their resources in effective and efficient ways. Policymakers are looking toward research for guidance in how to best support student achievement. State funding and policy play important roles in education, greatly affecting school and district spending, and an important focus becomes how research can contribute to the policymaking process.

II. Methodology

This policy research study examined resource allocation practices in 12 school districts in the Southwest region that have shown improvements in student achievement over time. The study examined district-level patterns of resource allocation, the decision-making structures that guide spending as well as barriers and challenges. In order to gain an in-depth understanding of the relationship between resource allocation and student performance, researchers used existing national data sets and also gathered data from interviews, focus groups, and surveys.

Participants. Three districts were selected in each of four Southwestern states (Arkansas, Louisiana, New Mexico, and Texas). The 12 districts were selected on the basis of consistent *improvements* in student performance over time, not on the basis of consistently *high* student performance. In order to increase the generalizability of the findings from the improvement districts, the 12 districts were selected to be representative of districts in their states in terms of demographic characteristics, including district size, urbanicity, and poverty level, as well as the racial/ethnic background of the student population.

Quantitative Data Sources. The study included a quantitative description of the resource allocation practices of the12 improvement districts using existing national databases with data on school district finances and staffing patterns. Researchers collected five years of fiscal and staffing data from the National Center for Education Statistics (NCES). Fiscal data from the "Annual Survey of Local Government Finances: School Systems" were collected from 1994-95 to 1998-99. The fiscal data included revenues by source and current expenditures by function and object. The revenue sources included federal, state, and local sources of revenue, and were analyzed as per pupil revenues and as shares of total revenue. The expenditure functions included instruction, support services, and non-instructional services, and the objects included salaries, employee benefits, and other objects. The expenditures data were analyzed as per pupil expenditures and as shares of current expenditures. The fiscal data were adjusted for inflation using the "Consumer Price Index – All Urban Consumers" or CPI-U from 1997.

Staffing data were collected from the NCES Common Core of Data from the "Local Education Agency (School District) Universe Survey" from 1995-96 to 1999-2000. The staffing data included the number of staff members in each of several categories. Teaching staff was analyzed as the number of teachers per 1000 students. Administrative staff included district administrators,

district administrative support, school administrators, and school administrative support, and was analyzed as the number of administrative staff per 1000 students.

Quantitative Data Analysis. The fiscal and staffing data were used to describe the resource allocation patterns of the 12 improvement districts. Patterns in the following variables were examined: Teachers per 1000 students, administrative staff members per 1000 students, revenue per pupil in each of the revenue categories, revenue in each category as a share of total revenue, expenditures per pupil in each of the expenditure categories, and expenditures in each category as a share of total current expenditures. The percent changes from the first to last year were also examined for each of these variables.

In addition to descriptions of the staffing and fiscal practices of the improvement districts, comparisons were also made of each of the 12 districts to groups of districts of similar size within their respective state. Each improvement district was compared individually to a group of comparison districts. The comparison districts were selected on the basis of size by ranking all the districts within each state by their 1999-2000 membership, and selecting the six districts immediately above and below each improvement district. The improvement district itself was also included in the comparison group, thus each comparison group consisted of 13 districts. (In three instances, the comparison groups consisted of fewer than 13 districts due to a limited number of comparable districts of the same size. However, no comparison group was smaller than five districts.)

Qualitative Data Sources and Collection Procedures. To gain an in-depth understanding of resource allocation practices, researchers also collected qualitative data at the 12 improvement districts. Researchers used two data collection strategies: individual interviews and focus groups.

Researchers conducted individual interviews with four to seven key district- and school-level decision-making personnel in each district. Interview data allowed researchers to understand how the 12 improvement school districts allocated their financial resources, what effective allocation practices they implemented, and what allocation challenges and barriers they faced. Interview subjects were identified based on their knowledge and expertise in district and school finance issues and their role in the resource allocation decision-making process. Participants included superintendents, directors of instruction, chief financial officers, personnel directors, principals, and other district and/or school personnel.

Researchers developed a structured interview protocol with closed and open-ended questions centered on three research questions in order to gain individual perspectives on resource allocation practices in the 12 improvement districts.

1. How do "improvement school districts" allocate their financial resources?
2. What allocation practices have improvement school districts implemented that they identify as effective?
3. What barriers and challenges have improvement school districts faced in resource allocation and reallocation?

Researchers piloted the instruments with a district in the region that was not part of the study sample. Interviews at each district site were conducted by at least two researchers. Each

interview was tape-recorded and interviewers wrote supporting notes. Additionally, the researchers recorded a site summary upon the completion of interviews at each site to capture major findings. Interview tapes were transcribed to provide a literal account of the interview dialogue.

The purpose of the focus groups was to capture interactive dialogue on resource allocation practices through the lens of school administration and broaden the size and scope of information available from the improvement district sample. Trained researchers conducted one focus group in each of the four states in the study. Each focus group was limited to no more than eight principals or other key school decision-making personnel. Focus group facilitators encouraged participants to exchange strategies and challenges for supporting improved performance through allocation practices.

Researchers developed a focus group protocol containing six questions focusing on innovative and effective practices and barriers and challenges relating to resource allocation. The instrument included open-ended questions constructed to allow participants to respond without limitation, yet provide clarity and focus on the desired topic. Representatives of the intended audience who were not part of the study reviewed the instrument. Two members of the research team conducted each focus group, allowing one person to facilitate the discussion and the other to take field notes and observe. Researchers tape-recorded the group session and audiotapes were transcribed to provide a literal account of the focus group dialogue.

Qualitative Data Analysis. Qualitative data from individual interviews and focus group sessions were reviewed, categorized, and analyzed using qualitative methods, as recommended by Miles and Huberman (1994). Interview and focus group transcripts were analyzed first using open coding in order to identify relevant themes. Three areas of thematic categories were identified, including: innovative resource allocation practices, general practices found effective or directly related to student achievement growth, and barriers and challenges in allocation practices. With the aid of qualitative software, researchers performed thematic coding of all transcripts. After thematic coding was completed, researchers organized results using the three research questions as organizing guides. Researchers again examined the data to identify themes and patterns within states and across all districts. Results were cross-referenced with quantitative data and with results from a survey of teachers in the 12 improvement districts in order to triangulate findings. To address inter-rater reliability, two researchers coded these data and at least one interviewer who performed the interview or focus group reviewed the coding results.

III. Results

Results from the Quantitative Data. Several comparisons between the 12 improvement districts and groups of comparison districts yielded interesting results regarding fiscal and human resource allocation. The staffing comparisons showed that a majority of the 12 improvement districts employed more teachers per 1000 students, and also increased the number of teachers from 1995-96 to 1999-00 more than comparison districts. Further, the revenue comparisons showed that a majority of the 12 districts generally received less revenue per pupil than comparison districts (a pattern that was most significant for local revenue). However, at the same time, a majority of the districts increased their revenues more than comparison districts in the

five-year period between 1994-95 and 1998-99, showing faster growth in resources than the comparison districts.

The comparisons of per pupil expenditures showed that a majority of the 12 districts spent more per pupil than comparison districts in the categories of total current expenditures, core expenditures, instruction, student support, instructional staff support, and other support (central and business support services). From 1994-95 to 1998-99, a majority of the districts also increased their per pupil expenditures in the categories of core expenditures and other support more than comparison districts. Core expenditures include expenditures for instruction, student support, and instructional staff support. The expenditure comparisons showed that the 12 districts spent more per pupil than comparison districts both in total core expenditures and in each of the three components of core expenditures. This suggests that the 12 districts spent more per pupil than comparison districts on instruction and instruction-related functions, as well as on total current expenditures and other support. Contrasting this, a majority of the 12 districts increased their per pupil expenditures for non-instructional services less than comparison districts over the five years. This category includes food services, enterprise operations, and other non-instructional services.

The comparisons of expenditure shares did not show any consistent patterns in how the 12 districts were different from the comparison districts. Often, the expenditure shares of the 12 districts were simply not different from those of the comparison districts. To sum up, the fiscal comparisons showed that the 12 improvement districts were different from comparison districts only in terms of per pupil expenditures, and not in terms of expenditure shares. This suggests that the level of expenditures was more important than the pattern of expenditures in these school districts.

Results from the Qualitative Data. As discussed above, the 12 improvement districts showed differences in revenues, expenditures and staffing when compared to like districts in their states. Also, the analysis of per pupil spending showed that the 12 improvement districts spent more on instruction and instruction-related functions, possibly indicating allocation priorities in those areas. Qualitative data provided further insight on the fiscal and staffing strategies of improvement districts and shed greater light on how successful districts allocate those resources.

District and campus administrators at the 12 improvement districts provided information about strategies and processes that supported effective resource allocation decisions. The 12 improvement districts demonstrated a mix of budgeting strategies, decision making structures, and leadership styles that, while distinct for each district, shared qualities that appeared to promote an effective allocation of resources. A common thread that became evident through the analysis of qualitative data is that the 12 improvement districts maintained a strong focus on instructional priorities in allocating resources. In addition, qualitative findings on staffing patterns and priorities support and expand the finding that the 12 improvement districts employed more teachers per 1,000 students than comparison districts.

Budgeting strategies in the 12 improvement districts can be generally characterized as needs-based and collaborative either among district administrators or between district and campus staff. Most districts prioritized flexibility in spending and timely accounting that allowed better

implementation of needs-based budgeting. Other successful fiscal strategies included prioritizing spending towards specific goals and site-based budgeting. Many of the 12 improvement districts were very active in grant-seeking, and interviews revealed evidence of both district and campus personnel soliciting supplemental funds through private and public sources.

Decision making strategies that were identified by interviewees as effective in allocating resources included evaluation and the use of data, collaboration, and a focus on clear goals and priorities. Nearly all of the 12 improvement districts described formal or informal ways that they have used evaluation, with an emphasis on collecting and examining student test data, to help direct the allocation of resources. The 12 improvement districts also relied on collaborative decision making to plan and allocate resources. Collaboration was used to plan budgets, decide on new instructional programs, adopt new textbooks and materials, and set school and district goals and expectations of students. Collaborative partners included representatives from district and school administration, parents and community, other school districts, and regional service centers. A number of the 12 improvement districts emphasized the importance of setting clear goals and priorities that in turn guided resource allocation. Interview results further revealed that the interviewees most often identified instructional goals and priorities as those that most strongly guided resource allocation, confirming qualitative results showing higher spending in instruction and instruction-related functions.

Leadership was another factor that supported effective allocation of resources in the 12 improvement districts. Nearly all of the 12 improvement districts benefited from stable and effective leadership. More than half had strong, stable superintendents and other districts benefited from the instructional and organizational leadership of a core group of administrators and/or principals. A common leadership strategy that district and school leaders found effective was a shared leadership approach in which a sense of ownership and greater responsibility for change was instilled in all staff. Coherent and consistent leadership by school and district administrators further supported the needs-based budgeting strategy utilized by many of the 12 improvement districts. Not only were goals clearly communicated, but also activities and initiatives that support those goals were consistently rewarded and supported through resource allocation.

Staffing practices that were analyzed using quantitative data from the NCES Common Core of Data revealed that the 12 improvement districts employed more teachers than comparable districts in their state. This finding is supported by district administrator interviews that revealed a strong emphasis on teacher recruitment and retention efforts. In an era of teacher shortages, the 12 improvement districts directed significant resources to building capacity of existing staff, increasing the number of certified teachers, limiting the use of paraprofessionals, and offering compensation incentives to attract and retain teachers. While interview results did not reveal that administrators made large increases in the number of teachers over the study period, the ability of the 12 improvement districts to retain teachers and to increase the number of certified teachers while limiting the use of paraprofessionals supports the findings from NCES data.

Qualitative findings on staffing priorities further confirm quantitative results that show the 12 improvement districts spent more on instruction and instruction-related activities. Most of the 12 improvement districts allocated and reallocated staff with a clear goal of enhancing instructional

leadership and increasing teacher quality. Staff changes, for the most part, directly supported district instructional goals of improving performance in literacy and math. New positions at schools were created such as subject area specialists, master teachers, or mentor teachers. These teachers, often selected from the existing teaching staff, were assigned to teach specific content or provide guidance to other teachers on successful teaching strategies. District-wide positions were created to address the instructional needs in key subject areas (math, literacy, science) or grade levels, support the use of technology, and coordinate parent involvement or community services.

IV. Conclusions

The quantitative and qualitative findings of this study regarding the resource allocation practices of 12 successful districts revealed a number of similar practices that could be beneficial for districts seeking to improve student performance. The study also has a number of implications for local and state decision makers as they work to improve student success.

- Reallocation of existing resources is possible and may be of paramount importance to funding schools in an era of declining revenues. The 12 improvement districts were able to make sustained improvements in student performance without having substantially more resources than comparable districts. Their strategies for effectively spending available funds more efficiently based on data-driven allocation decisions should be communicated to other districts.
- Recognizing that the improvement districts reported engaging in active grant-seeking (which could perhaps in part have contributed to their increased revenues) schools, districts and states may need to move beyond the traditional federal, state, and local education dollars and consider potential sources of additional funding for education.
- If resources are to be allocated with the goal of increasing student achievement, districts should focus attention and resources on instructional activities. Increased spending on instructional activities may mean spending less in other areas, however, as the 12 improvement districts attest, clear and focused priorities on instructional activities are essential to affect student performance gains.
- Recognizing that the improvement districts in the sample had greater numbers and larger increases of teachers per 1000 pupils, districts and schools can focus attention on recruitment and retention efforts, salary and incentive structures, and staff support systems so that they can fully staff and support their classrooms. The improvement districts effectively used such strategies to ensure having a highly qualified staff.
- Effective and efficient allocation of resources to support student success is best supported by an equally effective and efficient system of management and decision making. Budgeting strategies, decision making structures, leadership styles, and staffing patterns that state and district policymakers promote based the organizational needs of their schools and districts, can have a profound effect on their capacity to allocate resources in fluctuating fiscal and educational environments.

This study benefits education administrators, practitioners, policymakers, and researchers in addressing the link between resource allocation and student performance. The results help further

the dialogue on how spending impacts student success, and validates the understanding that using a systemic approach to resource allocation will best serve the success of students. Specifically, incorporating perspectives from school districts that have made performance improvements provides insights on successful resource allocation. Further, the study's focus on district and school resource allocation practices provides a regional perspective pursued in relatively few studies on resource allocation.

References

Coleman, J.S., Campbell, E.Q., Hobson, C. J., McPartland, J., Mood, A.M., Weinfeld, F. D., & York, R.L. (1966). *Equality of educational opportunity.* Washington, DC: U.S. Government Printing Office.

Hannaway, J., McKay, S. & Nakib, Y. (2002). Reform and resource allocation: National trends and state policies. In W.J. Fowler, Jr. (Ed.). *Developments in School Finance, 1999-2000.* Washington, DC: National Center for Education Statistics.

Hanushek, E.A. (1994). *Making schools work: Improving performance and controlling costs*. Washington, D.C.: The Brookings Institution.

Hedges, L.V., Laine, R.D., & Greenwald, R. (1994). Does money matter? A meta-analysis of studies of the effects of differential school inputs on student outcomes. *Educational Researcher,* 23(3), 5-14.

Miles, K.H. & Darling-Hammond, L. (1998). Rethinking the allocation of teaching resources: Some lessons from high-performing schools. *Educational Evaluation and Policy Analysis*, *20*, 9-29.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

Odden, A.R. & Busch, C. (1998). *Financing schools for high performance: Strategies for improving the use of educational resources*. San Francisco: Jossey-Bass.

Picus, L.O. & Fazal, M.B. (1995). The $300 billion question: How do public elementary and secondary schools spend their money? In W.J. Fowler, Jr. (Ed.). *Developments in school finance* (pp. 79-96). Washington, DC: National Center for Education Statistics.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Resource Allocation and Student Performance Improvements in 12 Districts in the Southwest Region

Author(s): Diane Pan, Zena H. Rudo, Lotte Smith-Hansen

Corporate Source: Southwest Educational Development Laboratory

Publication Date: 11-7-2002

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☒

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature: Zena H Rudo	Printed Name/Position/Title: ZENA H. RUDO, Ph.D. Program Associate
Organization/Address: Southwest Educational Dev. Lab. 211 E. Seventh St. Austin, TX 78701	Telephone: 512-476-6861 FAX: 512-476-2286
	E-Mail Address: ZRUDO@SEDL.ORG Date: 11-7-2002

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

University of Maryland
ERIC Clearinghouse on Assessment and Evaluation
1129 Shriver Laboratory
College Park, MD 20742
Attn: Acquisitions

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

EFF-088 (Rev. 9/97)
PREVIOUS VERSIONS OF THIS FORM ARE OBSOLETE.